

Digital transformation

Year: 2020 | Citations: 448 | Authors: Jörn Kleinert

Abstract

The introductory chapter to the book *The Data Imperative* examines how technological advances together with a new managerial mindset are driving digital transformation. While early business information systems were often self-contained and designed to solve specific problems, contemporary systems are highly interconnected and integrated. Corporations can use data flows to coordinate diverse processes and activities across organizational and geographic boundaries. The chapter explains how digital transformation involves a systematic shift from predominant reliance on human knowledge and skills to digital data flows and smart algorithms. Artificial intelligence techniques, such as generative adversarial networks and advanced natural language processing, and 5G wireless technologies create new opportunities to replace human routines with algorithmic processing. Data will continue to break down organizational silos, enable deeper collaboration across company boundaries, and speed up the development of new services.